

BOGDANOVICH, K.I.; GROMOV, M.I.

New soda substitute for the desulfuration of pig iron. Trudy
Inst. met. no.12:16-19 '63. (MIRA 16:6)

(Desulfuration)
(Calcium manganese oxide)

~~BOGDANOVICH, Lidiya Anatol'yevna~~

[Psychiatrist's notebook] Zapiska psikhiatra. Izd. 2-oe. Moskva,
Medgiz, 1956. 177 p. (MIRA 11:4)
(PSYCHOSES)

BOGDANOVICH, Lidiya Anstol'yevna, kand.med.nauk; NEYMAN, M.I., red.;
BEL'CHIKOVA, Yu.S., tekhn.red.

[A glass of vodka; alcoholism, its consequences, control, and
treatment] Riunka vodki; alkogolizm, ego posledstviia, bor'ba
s nim i lechenie. Moskva, Gos.izd-vo med.lit-ry, 1959. 38 p.
(MIRA 13:4)

(ALCOHOLISM)

BOGDANOVICH, Lidiya Anatol'yevna

[Psychiatrist's notebook] Zapiski psikhiatra. Izd.3., ispr.
i dop. Moskva, Medgiz, 1959. 214 p. (MIRA 14:3)
(PSYCHIATRY--CASES, CLINICAL REPORTS, STATISTICS)

BOGDANOVICH, L. A. kand. med. nauk

Irritability. Rabotnitsa 37 no.11:29-30 N '59. (MIRA 13:2)
(Irritability)

ROKHLIN, Leon Lazarevich, prof.; BOGDANOVICH, L.A., red.; ZUYEVA, N.K.,
tekhn.red.

[Soviet medicine in the control of mental diseases] Sovetskaya
meditsina v bor'be s psikhicheskimi bolezniami. Izd.3., ispr. 1
dop. Moskva, Gos.izd-vo med.lit-ry, 1960. 129 p.
(MENTAL ILLNESS) (MIRA 13:7)

GILYAROVSKIY, V.A. [deceased]; BOGDANOVICH, L.A.

Alcoholism and schizophrenia. Probl.sud.psikh. 9:355-360 '61.
(ALCOHOLISM) (SCHIZOPHRENIA) (MIRA 15:2)

BOGDANOVICH, L.A., kand.med.nauk

Heredity? Fate? Bad example? Zdorov'ie 7 no.11:19-20 N '61.

(ALCOHOLISM)

(MIRA 14:11)

BOGDANOVICH, Lidiya Anatol'yevna; SKORBILINA, T.N., red.;
BASHMAKOV, G.M., tekhn. red.

[Seen with the eyes of a physician; on longevity] Glazami
vracha; o dolgoletii. Moskva, Medgiz, 1963. 166 p.
(MIRA 16:7)

(LONGEVITY)

MOROZOV, G.V., otv. red.; BABAYAN, E.A., red.; BOGOLEPOV, N.K., red.;
GORDOVA, T.N., red.; ZHARIKOV, N.M., red. KERBIKOV, O.V.,
red.; ROZHN OV, V.Ye., redaktor; SLUCHNEVSKIY,
I.F., red.; SNEZHNEVSKIY, A.V., red.; FEDOTOV, D.D., red.;
SHOSTAKOVICH, V.V., red.; BOGDANOVICH, L.A., red.

[Current problems of psychiatry and neuropathology] Aktual'nye
voprosy psikhiiatrii i nevropatologii. Moskva, Izd-vo M-va
zdravookhraneniia SSSR, 1963. 400 p. (MIRA 16:10)
(PSYCHIATRY)
(NERVOUS SYSTEM—DISEASES)

BOGDANOVICH, Lidiya-Anatol'ievna, kand. med. nauk; KADER, Ya.M.,
red.

[Not everybody knows this; on the harm of alcohol] Ne vse
eto znaiut; o vrede alkogolia. Moskva, Voenizdat, 1964.
89 p. (MIRA 17:12)

BENA, Eduard; GOSKOVICH, Irzhi [Hoskovec, Jiri]; SHTIKAR, Irzhi
[Stikar, Jiri]; ZAV'YALOVA, T.P. [translator]; BOGDANOVICH,
L.A., kand. med. nauk, red.

[Psychology and physiology of an automobile driver] Psikho-
logiia i fiziologiia shofera. Moskva, Transport, 1965.
190 p. (MIRA 18:4)

KOVAL', V. A.; BOGDANOVICH, L. B.

Drilling and Boring Machinery

Boring bars with sliding tool bits. Podshipnik, No. 7, 1952.

Monthly List of Russian Accessions, Library of Congress, October 1952. UNCLASSIFIED.

PHASE I BOOK EXPLOITATION

1114

Bogdanovich, Leonid Boleslavovich

Gidravlicheskiye mekhanizmy postupatel'nogo dvizheniya; skhemy i konstruktsii (Hydraulic Mechanisms for Straight-line Motion; Circuits and Designs) Kiyev, Mashgiz, 1958. 180 p. 6,500 copies printed.

Reviewer: Bashta, T.M., Doctor of Technical Sciences, Professor;
Ed.: Leuta, V.I., Engineer; Tech. Ed.: Rudenskiy, Ya.V.; Chief
Ed. (Ukrainian Division, Mashgiz): Serdyuk, V.K., Engineer.

PURPOSE: This book is intended for engineers and technicians work-
in the field of machine-building and the designing of machines
with hydraulic transmissions.

COVERAGE: The author presents fundamental principles of designing
hydraulic systems for producing straight-line motion of various
mechanisms. The book also covers basic hydraulic circuits for

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Hydraulic Mechanisms for Straight-line (Cont.) 1114

speed regulation, designs of control and fluid flow distribution equipment, and basic hydraulic circuits for various cycles of machines and individual mechanisms as related to the location of and construction of power cylinders and operating conditions. The author thanks Engineer V.Ya. Karlevits for his assistance in selecting the material for this book and preparing the manuscript. There are 22 Soviet references.

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2-11-58

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BOGDANOVICH, Leonid Boleslavovich; BASHTA, T.M., doktor tekhn. nauk,
prof., retsenezent; GORELKIN, A.V., kand. tekhn. nauk, dots.,
red.; RIKBERG, D.B., red.; GORNOSTAYPOL'SKAYA, M.S., tekhn.
red.

[Hydraulic drives in machinery; diagrams and designs]Gidravli-
cheskie privody v mashinakh; skhemy i konstruktsii. Moskva,
Mashgiz, 1962. 222 p. (MIRA 16:3)
(Machinery--Hydraulic drive)

BOGDANOVICH, L.B., inzh.

Synchronous operation of hydraulic cylinders in hoisting
machinery. Mashinostroenie no. 6334-36 N-D '64 (MIRA 18:2)

BOGDANOVICH, L.I.

Treatment of alopecia areata with psoriasins. Vest. vener., Moskva No.1:
49-50 Jan-Feb 52. (CJML 21:4)

1. Departmental Physician. 2. Of the Department of Skin and Venereal
Diseases (Head--Prof. I.I. Bogdanovich), Vitebsk Medical Institute.

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CIA-RDP86-00513R000205910013-0

BOGDANOVICH, L. I.

Dissertation: "Changes of the Nervous System in Patients With Psoriasis." Cand Med
Sci, Minsk State Medical Inst, 10 Jun 54. Sovetskaya Belorussiya, Minsk, 28 May 54.

SO: SUM 284, 26 Nov 1954

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205910013-0"

BOGADANOVICH, L.I.

UESR/Human and Animal Physiology. Skin. T

Abs Jour: Ref Zhur-Biol., No 8, 1958, 36960.

Author : Bogadovich, L.I.

Inst :

Title : The Effect of Ultrasound on the Reactivity of
Healthy Skin in Man.

Orig Pub: Vrachebn. delo, 1957, No 4, 421-422.

Abstract: Determination was made in 30 men of change in skin reactivity under the effect of Ultrasound in direct contact for a period of 5 min., with a frequency of 1800 C and capacity of 1 watt/cm². (The area of the nail beds was exposed to sound for less than 2 min.) Under the effect of ultrasound the capillary circulation increased, the skin T^o was raised by 0.3-1°C, and sweat excretion increased (by 30%). Tactile

Card : 1/2

USSR / Human and Animal Morphology, Normal and Pathological. S-6
Cutaneous Integument

Abs Jour : Ref Zhur - Biol., No 18, 1958, No 83780

Author : ~~Bogdanovich, L. I.~~

Inst : Not given.

Title : Histological Changes in the Skin of Rabbits After Its
Subjection to the Action of Continuous and Pulsating Ultra
Sound.

Orig Pub : Arkhiv patologii, 1957, 19, No 6, 24-29

Abstract : The skin of the lateral trunk surface of rabbits, after the
removal of hair, was subjected for 10 minutes to the action
by direct contact (contact medium-vaseline oil) of conti-
nuous or pulsating (frequency of modulations 100 hertz,
while the ratio between impulse and pause was 1 : 1) ultra
sound with a frequency of 1,800 kilohertz, and an intensity
of 0.5 or 2.5 watt/cm². Within 48 hours, a skin biopsy

Card 1/2

BOGDANOVICH, L. I.: Doc Med Sci (diss) -- "Ultrasound in dermatology". Moscow, 1958. 19 pp (Min Health USSR, Central Inst for the Advanced Training of Physicians), 150 copies (KL, No 8, 1959, 137)

BOGDANOVICH, L.I., kand. med. nauk.

Ultrasonic therapy of trophic and radiation ulcers. Sov. med. 23 no.3:
60-62 Mr '59. (MIRA 12:4)

1. Iz kafedry kozhnykh i venericheskikh bolezney (zav. - prof. A. I. Kartamyshev) Tsentral'nogo instituta usovershenstvovaniya vrachey (dir. - V. P. Lebedeva).

(ULCERS, therapy,
trophic ulcer, ultrasonic ther. (Rus))
(ULTRASONICS, ther. use,
trophic ulcer (Rus))

BOGDANOVICH, Leonid Ivanovich, kand.med.nauk; KASHTANOV, F., red.;
STEPANOVA, N., tekhn.red.

[Treatment of skin diseases with ultrasonic waves] Lechenie
kozhnykh boleznei ul'trazvukom. Minsk, Gos.izd-vo BSSR. Red.
nauchno-tekhn.lit-ry, 1959. 194 p.

(ULTRASONIC WAVES--THERAPEUTIC USE) (MIRA 13:11)
(SKIN--DISEASES)

BOGDANOVICH, L.I., kand.med.nauk

Ultrasonic treatment of patients with pruritic dermatoses. Vest.derm.
i ven. 33 no.4:6-11 J1-Ag '59. (MIRA 12:11)

1. Iz kafedry kozhnykh i venericheskikh bolezney (zav. - prof. A.I.
Kartamyshev) Tsentral'nogo instituta usoversheustvovaniya vrachey
(dir. M.D. Kovrigina).
(ULTRASONICS, therapy)
(PRURITUS, therapy)

BOGDANOVICH, L.I.

Ultrasonics in the arthropathic form of psoriasis. Vop. kur.,
fizioter. i lech. fiz. kul't. 26 no.5:440-442 S-0 '61.

(MIRA 14:11)

1. Iz kafedry kozhnykh i venericheskikh bolezney (zav. - prof.
A.I.Kartamyshev) Tsentral'nogo instituta usovershenstvovaniya
vrachev (dir. - V.P.Lebedeva).

(ULTRASONIC WAVES---THERAPEUTIC USE) (PSORIASIS)

SUKHAREV, V.I., prof.; ETINGIN, B.Z.; ZASTENKER, F.S.; IOFINA,
O.S.; BOGDANOVICH, L.I.; KRYLOV, N.P.; SULTANOV, A.A.;
SPERANSKIY, A.P., red.

[Physical therapy, massage and exercise therapy] Fizio-
terapiia, massazh i lechebnaia fizkul'tura. Moskva, Me-
ditsina, 1965. 298 p. (MIRA 18:6)

1. Zaveduyushchiy kabinetom lechebnoy fizkul'tury Azerbayd-
zhanskogo instituta kurortologii i fizioterapii (for
Sultanov). 2. Zaveduyushchaya kabinetom lechebnoy fizkul'-
tury Moskovskoy gorodskoy bol'nitsy No.40 (for Iofina).

DEGTEREV, I., inzh.; BOGDANOVICH, M., kand.tekhn.nauk, dots.

Effect of repeated turns on its on a gyrocompass. Mor.flot 19 no.9:
10-11 S '59. (MIRA 12:11)

1. Kapitan parakhoda "Novosibirsk" (for Degterev). 2. Institut technoy
mekhaniki i optiki (for Bogdanovich).
(Gyrocompass)

Bogdanovich, M.G.

28
1
A*

Investigation of the interrelation of the cutting operation of synthetic ruby with its crystallographic orientation. S. E. Garrikskiy. Dokl. Akad. Nauk SSSR. Problems of the interrelations of the crystallographic orientation of ruby with its workability. M. G. Bogdanovich. *Izv. VUZ. Effect of thermal treatment of synthetic corundum crystals at 1300° on their mechanical properties.* M. E. Doronin. *Izv. VUZ. Effect of thermal treatment of synthetic corundum crystals at 1300° on their mechanical properties.* M. E. Doronin. *Izv. VUZ. Effect of thermal treatment of synthetic corundum crystals at 1300° on their mechanical properties.*

[Handwritten signature]

BOGDANOVICH, M.G.

Using fine powders of synthetic diamonds in the production of
watch and instrument stones. Mashinostroitel' no.10:30-31
0 '64. (MIRA 17:11)

BOGDANOVICH, M. I.

Bogdanovich, M. I.

"Material for the study of the antibacterial action -- against the diphtheria bacillus -- of filtrates obtained by the method of directed antagonism."
Ashkhabad Sci Res Inst of Epidemiology, Microbiology, and Hygiene.
Ashkhabad, 1955. (Dissertation for the degree of Doctor in Medical Science)

Knizhnaya letopis
No. 15, 1956. Moscow

Bogdanovich, M. I.

EXCERPTA MEDICA Sec.4 Vol.11/4 Med. Microb. etc. April 58

900. ANTIBACTERIAL SUBSTANCES AGAINST THE PATHOGENETIC ORGANISM OF ACUTE EPIDEMIC CONJUNCTIVITIS (KOCH-WEEKS) OBTAINED BY THE METHOD OF INDUCED ANTAGONISM (Russian text) - Gleibermane Ya., Grigoryants R. L. and Bogdanovich M. I. - TRUD. TURKMEN TRAKH. INST. 1956, 4 (79-83)

The investigations were based on the fundamental principles of Schill's doctrine of induced antagonism. The nutrient-deficient medium was seeded simultaneously with yeast cultures and Koch-Weeks bacilli. Addition of glucose to the medium produced the most favourable conditions for the growth of the yeast. The bacilli in the deficient medium were incubated in a thermostat at a temperature of 22-25°, the most favourable for yeasts. When the fermentation had ceased the fluid was cleared of the bacilli and tested for the presence of antibacterial bodies against Koch-Weeks bacillus. A determined amount of Koch-Weeks bacilli was added to 0.5 ml. of the fluid. After 1-24 hours, the medium was centrifuged, then subcultures were made on selective media and smears for bacterioscopic examinations. After 1-2 hours of mixing the filtrate with the Koch-Weeks bacilli suspension a distinct reaction of agglutination was observed. On bacterioscopic examination changes in the morphological and staining properties of the bacilli were noted. When seeding was done on nutrient media, inhibition of growth as compared with the control was observed. If the mixture of filtrate and bacillary suspension was left for a longer time lysis of the bacilli occurred. Growth did not occur on nutrient media. By this method 50 series of lysins were obtained. If 0.5 ml. of lysin was mixed with Koch-Weeks bacilli for 24 hours standing, dissolution of the bacillary bodies in amounts of 1-1.2 milliards ensued. The lysins have bactericidal properties also in respect of other microbes (*C. diphtheriae*, *M. pyogenes*). They retain their activity over long periods. In control experiments the lysin proved to be non-toxic; side-effects were not seen. The lysin was administered to 17 patients with signs of acute conjunctivitis by instillation into the conjunctival sac every 2 hours. The average duration of treatment was 6-7 days. In no case could the pathogen be detected following recovery, both microscopically or bacteriologically.

EXCERPTA MEDICA Sec.12 Vol.12/2 Ophthalmology Feb. 53

~~BOGDANOVICH, M.I.~~

261. EXPERIMENTAL REPRODUCTION OF ACUTE EPIDEMIC CONJUNCTIVITIS (Russian text). Gleberman G. Ya., Bogdanovich M.I. and Grigoryants R.L. TRUD. TURKMEN TRAKH. INST. 1956, 4 (85-89)

An acute epidemic conjunctivitis was produced in rabbits (25) by a thrice performed cauterization of the lower lid conjunctiva with a red-hot platinum loop. A cotton-wool tampon, soaked in the washings of a Koch-Weeks culture, was put in the conjunctival sac; the culture contained 4 milliards of bacilli per 1 ml. The lids were closed by two sutures for 48 hours; after this the sutures and tampon were removed. The rabbits developed a purulent secretion, hyperaemia of the skin, oedema of the lids, narrowing of the palpebral fissure, and hyperaemia and laxity of the lid conjunctivae. In some cases haemorrhagic specks on the conjunctiva and conjunctival injection of the ocular bulb were seen. The clinical diagnosis was confirmed bacterioscopically and bacteriologically in all the rabbits. The disease lasted 7-10 days. The conditions can be protracted for up to 25 days. Koch-Weeks bacilli were found by microscopy in the course of 6-21 days and by culture in 3-17 days. (S)

GLEYSERMAN, Ye.Ya.; BOGDANOVICH, M.I.; GUSHCHINA, V.P.

Measures for decreasing diphtherial incidence in Turkmenistan.
Edrav.Turk. 2 no.6:35-37 N-D '58. (MIRA 16:3)

1. Iz instituta epidemiologii i gigiyeny (dir. - Yu.V. Skavinskiy,
nauchnyy rukovoditel' - dotsent Ye.Ya. Gleyberman) Ministerstva
zdravookhraneniya Turkmenskoy SSR.

(TURKMENISTAN—DIPHTHERIA)

BEN'YAMINOVICH, I.M., glavnyy inzh.; SHAPIRO, F.B., zamestitel' glavnoy inzh.;
BOGDANOVICH, M.I.

Rapid construction of the "650" rolling mill in Nizhniy Tagil.
Prom. stroi. 37 no.4:37-47 Ap '59. (MIRA 12:6)

1.Ordena Lenina trest Tagilstroy. 2.Zamestitel' nachal'nika
proizvodstvennogo otdela Ordena Lenina tresta Tagilstroy (for
Bogdanovich).

(Nizhniy Tagil--Rolling mills)

BOGDANOVICH, M.M.; MOCHALIN, V.S.; IL'IN, P.A.; UKHOV, K.S., redaktor;
PRIMSON, M.M., tekhnicheskiy redaktor

[Elements of the theory of navigational gyroscopic instruments]
Elementy teorii navigatsionnykh giroskopicheskikh priborov.
Leningrad, Izd-vo "Morskoi transport," 1956. 270 p. (MLRA 9:8)
(Gyroscope)

BOGDANOVICH, M. M.

PHASE I BOOK EXPLOTATION

180

AUTHOR: See Table of Contents

TITLE: Theory and Design of Instrument-components in Precision Mechanics (Teoriya i raschet elementov priborov tochnoy mekhaniki); Collected articles, Nr 22 (Sbornik statey, Vyp.22)

PUB.DATA: Gos. nauchno-tekhn. izd-vo Mashinostroitel'noy literatury, Moscow-Leningrad, 1957, 168 pp. 6500 copies

ORIG. AGENCY: Leningradskiy institut tochnoy mekhaniki i optiki

EDITOR: Bogdanovich, M. M., Cand. of Tech. Science, Docent; Ed. In-Chief: Bol'shakov, S. A.; Ed. of Pub. House: Borodulina, I. A.; Tech. Ed.: Sokolova, L. B.

PURPOSE: This collection is intended for engineer , technical and scientific personnel working in the field of instrument manufacturing, It may also be useful to students engaged in instrument-manufacturing studies at institutions of higher education.

Card 1/5

Theory and Design of Instrument-components in Precision Mechanics (Cont.) 180

COVERAGE:

The following subjects are discussed: theory and precision of clock mechanisms and design of their component parts, such as conoids and elastic steel-band transmissions; determination of the line of action of forces acting on the specimen in tension and compression tests; screwed connections of machine parts; torque developed in a spherical gyroscope; graphic and analytical method for determining limits of changes of variable vector - components; determination of the relative position of links in three-dimensional link mechanisms.

TABLE OF CONTENTS:

1. Ananov, G. D., Candidate of Technical Sciences, Docent. Graphic and Analytical Method for Determining Limits of Changes of Variable Vector Components. 3

The author states that the problem of determining the maximum values of variable vector components was presented and solved by the design

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Theory and Design of Instrument-components in Precision Mechanics (Cont.) 180

department of the Scientific Research Institute of the Ministry of the Shipbuilding Industry in cooperation with the Department of Theoretical Mechanics of the Leningrad Institute of Precision Mechanics and Optics.

2. Kislitsyn, S. G., Candidate of Physical and Mathematical Sciences, Docent, Determination of the Relative Position of Links in Three-dimensional Link Mechanisms 12
The author refers to his previous work (Ref. 1 and 2) connected with the determination of relative positions of links in three-dimensional link mechanisms using the principle of vector analysis, and discusses application of this method to more complex mechanisms.
3. Tartakovskiy, V. A., Doctor of Physical and Mathematical Sciences, Professor Gofman, S. I., Candidate of Technical Sciences, Docent. Accuracy of Elastic Steel Band Transmissions 19
The authors discuss the effect of the elastic bending of steel on the accuracy of steel band transmission.
4. Safonova, Ye. B., Candidate of Technical Sciences. Torque Developed in the Spherical Gyroscope 39

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Theory and Design of Instrument-components in Precision Mechanics (Cont.) 180

The author analyses forces and moments developed in the spherical gyroscope and gives the equations for their determination.

5. Rittin, L. P., Candidate of Technical Sciences, Docent. Conoids: Kinematics and Selection. 55
The author discusses characteristics of conoids and their design for specific functions.

6. Kadykov, V. I., Candidate of Technical Sciences, Docent. Determination of the Line of Action of Forces Acting on the Specimen in Tension and Compression Tests. 82
The author discusses the effect of eccentric loading of the specimen in tension and compression tests on the determination of some mechanical properties of metals.

7. Goberman, P. N., Candidate of Technical Sciences, Docent, Relative Positions of Screwed Connections of Machine Parts 97
The author points out that in many types of screwed connections the parts should have definite relative positions.

Card 4/5

Theory and Design of Instrument-components in Precision Mechanics (Cont.) 180

8. Aksel'rod, Z. M., Candidate of Technical Sciences, Docent. Theoretical and Experimental Investigation of Clock Mechanisms With Forced Movement and Small Oscillation Period of the Balance Wheel. 106
The author derives and analyses the principle equations for determining the effect of actuating moment on the period and amplitude of balance wheel in clock mechanisms.
9. Aksel'rod, Z. M. Stabilization of the Oscillation Period of a Balance Wheel Connected with the Movement Mechanism by Means of a Hair Spring Having a Non-linear Restoring Moment. 127
The author discusses the effect of non-linearity of the hair spring restoring moment on the characteristics of a regulating mechanism equipped with free movement of the tie bar.
10. Aksel'rod, Z. M. Chronometer Impulse Stabilizers. 154
The author points out imperfections of existing mechanical chronometers and discusses some more accurate types.

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GO/gmp.
May 21, 1958

SOV/146-1-1-9/22

AUTHOR: Bogdanovich, M.M., Candidate of Technical Sciences,
Docent

TITLE: The Effect of Repeated Ship Maneuvers on the Gyro-
Compass (O vliyaniy povtornykh manevrov korablya na
girokompas)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy -
Priborostroyeniye, 1958, Nr 1, pp 56-67 (USSR)

ABSTRACT: The article studies the effect of a series of success-
ive maneuvers on a ship's gyrocompass from the point
of view of a single rotor compass with "pendulum".
Here in the oscillations damping device, the hydro-
scopic chamber is not connected with the pendulum on
the device's vertical axis, but is displaced a little
to the east. First, the deviations are investigated
which appear at the completion of the first maneuver.
These deviations are taken as initial values as
against those deviations after the maneuver, and the
second as initial values after the third group of

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The Effect of Repeated Ship Maneuvers on the Gyro-Compass SOV/146-1-1-9/22

deviations have occurred and so on. Differential equations are given for oscillations of the gyro-compass' sensitive element. The following results emerge during the 1st and 2nd maneuvers from computations for a damped gyro-compass. Details are given of the computed amount of ballistic deviation of the gyro-compass at the end of the first and second maneuvers and the effect upon this of latitude and the switching on or off of the damping equipment. There are 4 graphs, 6 tables and 4 Soviet references.

ASSOCIATION: Leningradskiy institut tochnoy mekhaniki i optiki
(Leningrad Institute of Fine Mechanics and Optics)

Card 2/2

24(3)

AUTHOR:

SOV/146-58-4-9/22
Bogdanovich, M.M., Candidate of Technical Sciences,
Docent

TITLE:

Sustained Oscillations of a Gyrocompass With Mercury
Tanks

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy, Priborostroye-
niye, 1958, Nr 4, pp 54-56 (USSR)

ABSTRACT:

Numerous papers are devoted to sustained oscillations of a gyrocompass with mercury tanks. However, when studying this problem, the majority of authors does not consider the presence of a delay in the mercury circulation but regard a gyrocompass with mercury containers being identical to a pendulum gyrocompass. However, not in all cases such an identity is justified and permissible. Analyzing the character of motion of the master shaft of the gyrocompass with communicating mercury tanks instead of a pendulum compass, it is noticed, that with an ideal suspension of the sensitive element, the arising natural oscillation are somewhat different. For obtaining purely continuous

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SOV/146-58-4-9/22

Sustained Oscillations of a Gyrocompass With Mercury Tanks

oscillations, as with a pendulum gyrocompass, it is necessary to introduce insignificant damping. This may be performed connecting the plates of the mercury tanks in the chamber of the gyroscope not on a vertical line, but shifted somewhat to the east of the vertical by the angle ξ_k . Such a connection creates a moment in regard to the vertical suspension axis which will damp the aforementioned deviation of the oscillations and will provide a purely continuous oscillation of the gyrocompass. The magnitude ξ_k depends on the latitude of the place of observation and rises with its increase. At a latitude $\varphi = 80^\circ$ and $F = 0.2$ 1/sec the magnitude ξ_k will be equal to 0.0038 and at a latitude of $\varphi = 0^\circ$ $\xi_k = 1.254$. This circumstance must be considered when investigating the influence of the maneuvering of a ship on the gyrocompass readings.

Card 2/3

Sustained Oscillations of a Gyrocompass With Mercury Tanks

SOV/146-58-4-9/22

There is 1 Soviet reference.

ASSOCIATION: Leningradskiy institut tochnoy mekhaniki i optiki
(Leningrad Institute of Precision Mechanics and Optics)

SUBMITTED: June 3, 1958

Card 3/3

BOGDANOVICH, M. M. (Candidate of Technical Sciences)

"The Effect of Ship Maneuvering on Gyrocompass Readings"

paper presented at the Second Scientific and Technical Intervuz Conference on Problems of Contemporary Gyroscopy, Ye. F. Otvagin, Secretary of the Organization Committee; Leningrad, Izvestiya Uchebnykh Zavedeniy, Priborostroyeniye, No. 5, Sep/Oct 1958, pp 161-163

The Second Intervuz Conference on Problems of Contemporary Gyroscopy Technique convoked by decision of the Ministry of Education USSR, took place in the Leningrad Institute of Precision Mechanics and Optics from 24 to 27 November 1958.

85122

13,2100

S/123/60/000/017/013/016
A005/A001

Translation from: Referativnyy zhurnal, Mashinostroyeniye, 1960, No. 17, p. 238.
93433

AUTHOR: Bogdanovich, M.M.

TITLE: On the Accumulation of Ballistic Deviations in the "Kurs"-Type
Gyrocompass ⁹₂₈

PERIODICAL: V sb.: Vopr. teorii i rascheta giropriborov i priborov techn.
mekhan. (LITMO, No. 36), Leningrad, 1958, pp. 24-34

TEXT: The behavior of a two-rotor ship-gyrocompass of the "Kurs"-type was considered in the case when the ship performs repeated maneuvers alternative changes of the course and speed or of the speed at a constant course. It is shown that an accumulation of errors takes place in this case.

L.I.Ya.

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

83465

S/146/60/003/004/005/010
B004/B056

13.2521
9.6100

AUTHORS: Bogdanovich, M. M., Il'in, P. A.

TITLE: A Gyrocompass⁹ for Latitude Determination With Indirect Correction

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye, 1960, Vol. 3, No. 4, pp. 43-47

TEXT: By controlling a gyroscope with moments applied to its suspension pin it is possible to produce an apparatus which simultaneously indicates the true meridian-direction and latitude. On an astatic gyroscope in Cardanic suspension (Fig. 1) a gyromotor acts as sensitive element, upon whose vertical axis correcting moments act by means of a moment transducer. These moments are proportional to the angular velocity $\dot{\alpha}$ of the deviation of the main axis of the gyroscope from the meridian plane: $M\dot{\xi} = k\dot{\alpha}$. This correcting moment is calculated by means of a computer obtaining all data necessary for determining the value $M\dot{\xi}$. By means of the geographically orientated coordinate system $O\{\eta\xi\}$, which is connected with

Card 1/2

83465

A Gyrocompass for Latitude Determination With Indirect Correction S/146/60/003/004/005/010
B004/B056

the earth, and the coordinate system Oxyz (Fig. 2) the authors derive the equations of motion of the main axis of the gyroscope. This paper was recommended by the kafedra giroskopicheskikh i navigatsionnykh priborov (Chair of Gyroscopic and Navigation Instruments). There are 2 figures. ✓

ASSOCIATION: Leningradskiy institut tochnoy mekhaniki i optiki
(Leningrad Institute of Precision Mechanics and Optics)

SUBMITTED: February 27, 1960

Card 2/2

9.6100

S/124/60/000/012/002/009
A005/A001

Translation from: Referativnyy zhurnal, Mekhanika, 1960, No. 12, p. 11, # 15548

AUTHOR: Bogdanovich, M.M.

TITLE: On the Superposition of Ballistical Deviations in the Gyrocompass of the "Kurs"-Type

PERIODICAL: V sb.: Vopr. teorii i rascheta giropriborov i priborov tochn. mekhan. (LITMO, No. 36). Leningrad, 1958, pp. 24-34

TEXT: The behavior is studied of the two-rotor gyrocompass of the "Kurs"-type at an intricate maneuvering of the ship when successive variations of velocity in small time intervals (at a constant course) take place. Hereat, new ballistical deviations are superimposed upon those originated earlier which have not yet been extinguished. The author proceeds from the approximate motion equations of the compass gyrosphere and derives the analytic expression of deviations appearing at the end of the maneuver considered.

V.V. Krementulo

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

PHASE I BOOK EXPLOITATION

SOV/5615

Bogdanovich, Mikhail Mitrofanovich, and Petr Alekseyevich Il'in

Giroskopicheskiye pribory i ustroystva; osnovy teorii (Gyroscopic Instruments and Devices; Fundamentals of the Theory) Leningrad, Sudpromgiz, 1961.
359 p. Errata slip inserted. 6,900 copies printed.

Reviewers: A. N. Dezhnev, Candidate of Technical Sciences, A. Yu. Ishlinskiy, Academician, D. R. Merkin, Doctor of Technical Sciences, Ya. G. Ostromakhov, Engineer; Scientific Ed.: N. V. Butenin; Ed.: Ye. N. Shaurak; Tech. Ed.: R. K. Tsai.

PURPOSE: This book is intended for students of instrument building in schools of higher education and in maritime schools. It may also be useful to technical personnel engaged in designing and manufacturing gyroscopic instruments and devices.

COVERAGE: The book presents problems of the theory and principles of operation of various gyroscopic instruments and devices. Stress is laid on instruments which are widely used in practice. However, some new circuits which as yet

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Gyroscopic Instruments (Cont.)

SOV/5615

have no widespread application, such as gyroscopic latitude indicators and vibratory gyros, are discussed. The authors thank N. V. Butner, Professor, Doctor of Physics and Mathematics, A. Yu. Ishlinskiy, Professor, Academician, D. R. Merkin, Doctor of Physics and Mathematics, A. N. Dokuchayev, Docent, Candidate of Technical Sciences, Ya. G. Ostromukhov, Engineer, and V. A. Pavlov, P. I. Saydov and S. S. Rivkin, Professors, Doctors of Technical Sciences, for their advice. There are 49 references: 45 Soviet, 2 English, and 2 German.

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BOGDANOVICH, M. M. (Docent, Candidate of Technical Sciences)

"Theoretical Proposal for the Possible Design of a Generalized Gyro Instrument"

report presented at the Scientific-technical Conference on Modern Gyroscope
Technology Ministry of Higher and Secondary Special Education RSFSR, held
at the Leningrad Institute of Precision Mechanics and Optics, 20-24 November 1962

(Izv. vysshikh uchebnykh zavekeniy. Priborostroyeniye, v. 6, no. 2, 1963)

BOGDANOVICH, M.M.

AED No. 500-22 22 June

DESIGNING A LATITUDE GYROCOMPASS (USSR)

Bogdanovich, M. M., and P. A. Il'in. *Izvestiya vysshikh uchebnykh zavedeniy. Prikladnaya fizika*, v. 8, no. 2, 1968, 74-77. S/146/83/003/002/003/010

The conversion of a gyroscope into a device which simultaneously indicates the latitude and the direction of the geographic meridian (latitude gyrocompass) by incorporating special torque transducers is described. An astatic gyroscope with three degrees of freedom installed on a platform with gymbel suspension and stabilized with respect to the horizon is used as a sensing element. The input signals to the torque transducers are produced by a computing device which receives all data necessary to obtain a required torque. To obtain a signal proportional to the latitude angle, a torque proportional to a vertical component of the daily rotation of the earth and to the velocity of the moving object must be applied to the horizontal gymbel axis. On the basis of procession theory, equations of motion of the device are derived. The work was done at the Leningrad Institute of Precision Mechanics and Optics. [AS]

Card 1/1

BOGDANOVICH, M.M.

ADP Nr. 990-6 14 June

SCIENTIFIC-TECHNICAL CONFERENCE ON MODERN GYROSCOPE TECHNOLOGY (USSR)

Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye, v. 8, no. 2, 1983, 156-158. S/146/63/006/002/010/010

The Fourth Conference on Gyroscope Technology, sponsored by the Ministry of Higher and Secondary Special Education RSFSR, was held at the Leningrad Institute of Precision Mechanics and Optics from 20 to 24 November 1962. The conference was attended by representatives from 93 organizations in 30 cities, including educational establishments, scientific research institutes, design bureaus, and industrial concerns. The following are some of the topics covered in the 92 papers presented and discussed at the conference. Vibrations of a gyroscope pendulum with a movable suspension in a nonuniform gravitational field: M. Z. Litvin-Sedoy, Senior Scientific Worker; improving dynamic characteristics of some gyro instruments and devices: A. V. Reprikov, Docent, Candidate of Technical Sciences; some problems of the dynamics of a gyroscope with an electric drive installed in a gimbal suspension: S. A.

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AID Nr. 990-6 14 June

13

SCIENTIFIC-TECHNICAL CONFERENCE (Cont'd)

8/146/63/006/002/010/010

Kharlamov, Engineer; problems of the theory of the inertial method for measuring aircraft acceleration: I. I. Pomykayev, Docent, Candidate of Technical Sciences; determining the drift of a floated-type integrating gyroscope without the use of a dynamic stand: G. A. Slomyanskiy, Docent, Candidate of Technical Sciences; natural damping of nutational vibrations of a gyroscope: N. V. Gusev, Engineer; motion of a not quite symmetrical gyroscope pendulum with vertically movable support: A. N. Borisova, Aspirant; gyroscope-type inclinometer for surveying vertical freezing wells: V. A. Sinitsyn, Candidate of Technical Sciences; effect of joints between channels in triaxial gyro-stabilized platform: L. N. Slezkin, Engineer; theoretical proposal for the possible design of a generalized gyro instrument: M. M. Bogdanovich, Docent, Candidate of Technical Sciences; problem of drift in a power-type triaxial gyro stabilizer: V. N. Karpov, Engineer; methods of modeling random disturbances in gyro systems: S. S. Shishman, Senior Engineer; method of noise functions for investigating a system subjected to random

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AID Nr. 990-6 14 June

SCIENTIFIC-TECHNICAL CONFERENCE (Cont'd)

8/146/63/006/002/010/010

signals: G. P. Molotkov, Docent, Candidate of Technical Sciences; drifts in a gyro-stabilized platform as a result of the effect of cross joints under determined and random disturbances: B. I. Nazarov, Docent, Candidate of Technical Sciences; stability and natural oscillations in inhomogeneously rigid gyro systems with backlash under external influences: S. A. Chernikov; methods of designing a gyro vertical with automatic latitude and course corrections: A. V. Til', Candidate of Technical Sciences; use of asymptotic methods in solving problems of the motion of an astatic gyroscope in gymbol suspension: D. M. Klimov, Candidate of Physical and Mathematical Sciences, and L. N. Slezkin; theory of aperiodic gyro pendula: V. S. Mochalin, Docent, Candidate of Technical Sciences; and selecting basic parameters of course gyros by using nomograms: V. P. Demidenko, Engineer. [AS]

Card 3/3

BOGDANOVICH, M.M.

Ballistic deviations of a gyrocompass having no velocity deviation.
Izv.vys.ucheb.zav.; prib. 6 no.3:77-84 '63. (MIRA 16:9)

1. Leningradskiy institut tochnoy mekhaniki i optiki. Rekomendovana kafedroy giroskopicheskikh i navigatsionnykh priborov.

ACCESSION NR: AP4037470

S/0146/64/007/002/0107/0114

AUTHOR: Bogdanovich, M. M.

TITLE: Theory of a single-rotor gyrocompass with electromagnetic correction

SOURCE: IVUZ. Priborostroyeniya, v. 7, no. 2, 1964, 107-114

TOPIC TAGS: gyro, gyrocompass, single rotor gyrocompass, electromagnetic correction gyrocompass

ABSTRACT: The electromagnetic-correction system includes (see Enclosure 1) indicator 4 of the inclination of the principal axis Ox from the horizon, amplifier 8, vertical and horizontal torque sensors 5 and 6, and auxiliaries. Computer 11 sends signals to 5 and 6 where the correction torques are created. These torques cause a rotation of the principal gyro axis, in the inertial space, with angular velocities equal to those of the rotation of the meridian and horizon planes due to the rotation of the Earth and the object. The azimuth-error signal of chamber 1 and vertical ring 2 is sent from sensor 7 to amplifier 8 and, further, to motor 9; the latter brings the position of servo system 3 and ring 2 in

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ACCESSION NR: AP4037470

agreement with the gyrochamber. Course sensor 10, connected with the servo system by a gear, energizes the instruments. Equations describing the motion of the gyro principal axis are set up on the basis of the precession theory. The effect of the object (aircraft) maneuvering on the gyrocompass reading is investigated. It is found that by disconnecting the inclination indicator from the torque sensors, a gyrocompass operating with a long period will not have a ballistic deviation toward the end of the maneuver. Orig. art. has: 2 figures and 18 formulas.

ASSOCIATION: Leningradskiy institut tochnoy mekhaniki i optiki (Leningrad Institute of Fine Mechanics and Optics)

SUBMITTED: 22Apr63

DATE ACQ: 05Jun64

ENCL: 01

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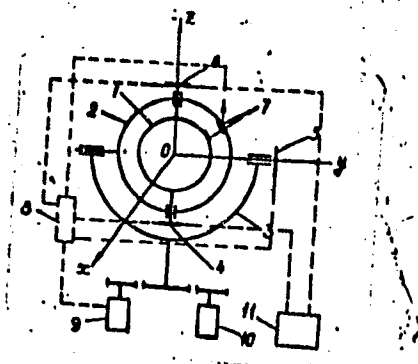
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Card 2/3

ACCESSION NR: AP4037470

ENCLOSURE 01



A simplified diagram of the sensitive element
of an electromagnetically-corrected gyrocompass

Drawn x/x

BOGDANOVICH, M.M.

Theory of the single-rotor gyrocompass with electromagnetic correction. Izv.vys.ucheb.aav.; prib. 7 no.2:107-114 '64. (MIRA 18:4)

1. Leningradskiy institut tochnoy mekhaniki i optiki. Rekomendovana kafedroy giroskopicheskikh i navigatsionnykh priborov.

BOGDANOVICH, M.M.

Effect of the acceleration of the object on the reading precision
of a gyroazimuth. Izv.vys.ucheb.zav.; prib. 8 no.1:105-112 '65.

(MIRA 18:3)

1. Leningradskiy institut tochnoy mekhaniki i optiki. Rekomendovana
kafedroy giroskopicheskikh i navigatsionnykh priborov.

L 27850-66 EWA(b)-2/EWA(j)/EWT(1) JK

ACCESSION NR: AP5006642

S/0146/65/008/001/0105/0112

AUTHOR: Bogdanovich, M. M.

TITLE: Effect of acceleration of the vehicle on the accuracy of a gyro azimuth

SOURCE: IVUZ. Priborostroyeniye, v. 8, no. 1, 1965, 105-112

TOPIC TAGS: gyro, gyro azimuth

ABSTRACT: The effect of acceleration of the base of a gyro-azimuth equipped with both horizontal (proportional) and azimuth (weight-type) corrections upon the gyro-azimuth accuracy is theoretically investigated. It is found that: (1) With horizontal accelerations of the base, a minimum gyro-azimuth error occurs when the center of gravity lies on the axis of the gyro rotation; if, however, the center of gravity is offset along the vertical axis Oz_1 , the axis should be kept strictly in the horizontal plane in order to minimize the error; (2) With vertical accelerations (the vehicle ascending and descending), the gyro-azimuth error can be found

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L 27850-66
ACCESSION NR: AP5006642

from formula (15). Orig. art. has: 1 figure and 37 formulas.

ASSOCIATION: Leningradskiy institut tochnoy mekhaniki i optiki (Leningrad
Institute of Fine Mechanics and Optics)

SUBMITTED: 10Feb63 ENCL: 00 SUB CODE: NG

NO REF SOV: 002 OTHER: 000

Card 2/2 CC

SEMYKIN, K.I., otv. red.; KORCHENYUK, Ya.T., starshiy nauchnyy sotr., red.; GRIGOR'YEV, M.A., kand. sel'khoz. nauk, red.; SUKACHEV, V.P., red.; BOGDANOVICH, M.V., red.; NIKOLAYCHUK, G.M., red.; SERDYUK, B.M., red.; KVITKA, S.P., tekhn. red.

[Scientific works of the Veselyy Podol Agricultural Experiment Station for 1927-1958] Nauchnye trudy Veselopodolianskoi opytno-selektsionnoi stantsii za 1927-1958 gg. Kiev, Izd-vo Ukrainskoi akad. sel'khoz. nauk, 1961. 156 p. (MIRA 15:3)

1. Kiev. Vsesoyuznyy nauchno-issledovatel'skiy institut sakharnoy svekly. 2. Zaveduyushchiy otdelom selektsii sakharnoy svekly Veselopodolyanskoy opytno-selektsionnoy stantsii, Semenovskiy rayon, Poltavskaya oblast' (for Sukachey). 3. Zaveduyushchiy laboratoriyey fitopatologii Veselopodolyanskoy opytno-selektsionnoy stantsii, Semenovskiy rayon, Poltavskaya oblast' (for Bogdanovich). 4. Zaveduyushchiy laboratoriyey agrokhimii Veselopodolyanskoy opytno-selektsionnoy stantsii, Semenovskiy rayon, Poltavskaya oblast' (for Nikolaychuk).

(Poltava Province--Agricultural experiment stations)

(Poltava Province--Sugar beets)

~~BOGDANOVICH~~

~~N.A.~~

X-ray protective rubber. O. A. Blokh, M. S. Kogal, N. A. Bogdanovich, Z. N. Zhilova, and B. P. Protkerovich (Varelav Rubber Tech. Products Plant, Moscow Chem. Ind., U.S.S.R.). *Khim. Prom.* 1954, 100-2.—The Pb equiv. of x-ray protective rubber is reduced 4-8 times by 100% substitution of Pb with lithopone, 3-4 times with Ba, and 2 times with Sb₂S₃ or Sb₂S₅ in the compounding. A substitution of 60 vol.-% of Pb with Ba or Sb compds. reduces the protective effect but little compared to compounding with pure Pb. A substantial saving in cost without impairing the quality is achieved by substituting 28 vol.-% of PbO with Ba or Sb compds. W. M. S.

5(1,3)

AUTHORS:

Blokh, G. A., Kogan, M. S.,
Bogdanovich, N. A., Bol'shakova, Z. N.,
Tyuremnova, Z. D.

SOV/153-58-6-18/22

TITLE:

On the Stability in Water of the Petroleum and Benzene-resistant Rubbers (Ob ustoychivosti k vode maslobenzostoykikh rezin)

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1958, Nr 6, pp 101-107 (USSR)

ABSTRACT:

The rubbers mentioned in the title get into contact as well with water at normal and at raised temperatures under operational conditions beside the substances to which they are resistant. A particular shortcoming of the rubber products for special use (butadiene nitril- and chloroprene rubber) in operation is their low stability in water. They swell up to 3-5% at normal temperatures and up to 7-9% at 100°. In consequence of this water penetrates e.g. into cables. In the present investigation the action of the following factors upon the stability in water of the rubbers mentioned in the title was investigated: a) vulcanization conditions (duration, temperature), b) substitution of the hydrophilic components

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On the Stability in Water of the Petroleum and
Benzene-resistant Rubbers

SOV/153-58-6-18/22

of the rubber mixture by hydrophobic ones, c) introduction of synthetic resins, d) of lead oxides and e) the previous heating. On the strength of the above mentioned the attempt was made to increase the stability in water of the mineral oil-resistant rubbers from synthetic home rubbers (SKN-26, nayrit) technologically and according to schedule. For this purpose the mentioned rubbers were soaked in technical water for 1.5 and 10 days at 80 and 100°. The composition of the experimental rubber is given. The action of the duration and the temperature of the vulcanization (142, 151, and 160°) on the stability in water is shown in figure 1. At 25° this action is practically equal to zero, it rises to a certain extent at a water temperature of 100° if higher vulcanization temperatures are used. The previous heating of the rubber did not cause any important effect. Furthermore the influence of all rubber ingredients on the stability in water was investigated. Figure 2 shows that an unfilled rubber mixture which consists of only SKN-26 and the group which accelerates the vulcanization swells in water much more than a mixture with filler. Dibutyl phthalate reduces the swelling of the

Card 2/4

On the Stability in Water of the Petroleum and
Benzene-resistant Rubbers

SOV/153-58-6-18/22

filled rubber in the case of boiling by the 2-3 fold, as compared to unfilled rubber. This influence cannot be observed at room temperature. Figure 3 shows the influence of the nitril groups. They increase the stability in water at 100° by almost 50%. The introduction of synthetic resins improves the physico-mechanical properties of the rubber. Cresol formaldehyde resins do not improve the stability in water, Yarrezin-B-resin deteriorates it at 100°, increases it, however, at room temperature. Carbolite resin and alkyd resin improve the stability in water. The stability in water of the rubber on the chloroprene rubber basis may be improved by the substitution of the zinc oxide and magnesium oxide in preparation by minium or red lead, combined with Thiuram and diphenyl guanidine. The introduction of soot and the removal of chalk mixtures from the preparation has a similar effect. There are 6 figures, 1 table, and 6 Soviet references.

ASSOCIATION: Kafedra tekhnologii reziny, Dnepropetrovskiy khimiko-
Card 3/4 tekhnologicheskii institut i Yaroslavskiy zavod rezinovykh
tekhnicheskikh izdeliy (Chair of Rubber Technology,

On the Stability in Water of the Petroleum and
Benzene-resistant Rubbers

SOV/153-58-6-18/22

Dnepropetrovsk Institute of Chemical Technology and Yaroslavl'
Plant of Technical Rubber Products)

SUBMITTED: November 29, 1957

Card 4/4

SOV/138-59-4-11/26

AUTHORS: Blokh, G.A., Kogan, M.S., Bogdanovich, N.A., Bol'shakova, Z.N., and Prokhorovich, E.P.

TITLE: Barium Sulphate as a Replacement for Lead Oxide in X-Ray Absorbing Rubbers (Sernokislyy bariy kak zamenitel' okisi svintsa v rentgenrezinakh)

PERIODICAL: Kauchuk i Rezina, 1959, Nr 4, pp 42-44 (USSR)

ABSTRACT: Formulae are given relating the stopping power of material to the wavelength of the X-rays, the density of the material, and to its atomic number Z. Barium has about one third of the stopping power of lead when considering X-rays of longer wavelengths, but has greater stopping power than lead to X-rays at the lower end of the spectrum. Table 1 gives the composition of the standard mix used for protective rubber sheet. This contains 1000 parts of lead oxide by weight to about 138 parts of rubber, sulphur etc., and of two other mixes containing 900 parts lead oxide and 100 parts Lithopon (Lithopon is an equimolecular mixture of barytes and zinc sulphide), in one case, and 750 parts of lead oxide and 250 parts barytes in the other case - the same rubber mix being involved in all three cases. Table 2 shows the equivalent thickness of rubber mixes containing different percentages of Lithopon

Card 1/3

SOV/138-59-4-11/26

Barium Sulphate as a Replacement for Lead Oxide in X-Ray Absorbing Rubbers

instead of lead oxide as compared with the thickness of a lead sheet of the same stopping power - these determinations being made by using an X-ray source and an ionization chamber. The stopping power of barytes is greater than Lithopon. Table 3 shows that replacement of 25% of the lead oxide by barytes gives the same equivalent thickness as the standard mix with only lead oxide filler. The mix with 25% barytes has similar mechanical properties but has a specific gravity of 3.9 as against 4.62 for the standard mix. This lower density is the main advantage. Table 4 shows equivalent lead thicknesses for replacement of lead oxide by various percentages of filling materials, including antimony penta- and tri-sulphides, Lithopon, barytes (barium sulphate), and barium carbonate. As a result of these investigations, the Yaroslavl' Factory of Technical Rubber Components, now replaces 25% of the lead

Card 2/3

SOV/138-59-4-11/26

Barium Sulphate as a Replacement for Lead Oxide in X-Ray Absorbing Rubbers

oxide formerly used in the standard X-ray rubber mixes with barytes. This gives an annual saving of 65 metric tons of lead oxide which is equivalent to 56 tons of lead. Greater proportions of barytes can be introduced into rubbers which are intended only for absorption of X-rays of wavelengths at the lower end of the spectrum, i.e. X-rays in the 0.260 - 0.200 kX range
(1 kX = 1.00202 Å = 1.00202×10^{-8} cm).
There are 4 tables and 4 Soviet references.

ASSOCIATION: Dnepropetrovskiy khimiko-tekhnologicheskii institut i Yaroslavskiy zavod rezino-tekhnicheskikh izdeliy (Dnepropetrovsk Chemical Technology Institute and Yaroslavl' Factory of Technical Rubber Components)

Card 3/3

ZAKHAROV, N.D.; BOGDANOVICH, N.A.; VOLKOVA, M.I.

Reclaimed rubber from butadiene-nitrile raw rubbers. Izv.vys.
ucheb.zav.;khim. i khim.tekh. 3 no.3:527-533 '60. (MIRA 14:9)

1. Yaroslavskiy tekhnologicheskii institut i yaroslavskiy
zavod rezino-tekhnicheskikh izdeliy, kafedra tekhnologii reziny.
(Rubber, Reclaimed) (Butadiene)

BOGDANOVICH, N.A.; BOL'SHAKOVA, Z.N.; TYUREMNOVA, Z.D.

Industrial testing of soft butadiene-nitrile rubbers. Kauch.1
rez. 20 no.5:45-46 My '61. (MIRA 14:5)

1. Yaroslavskiy zavod Rezinovykh tekhnicheskikh izdeliy.
(Rubber, Synthetic) (Butadiene)

37900

S/138/62/000/005/006/010
A051/A126

15.9.80

AUTHORS: Blokh, G.A.; Kogan, M.S.; Bogdanovich, N.A.; Glavina, V.S.;
Krokhina, M.V.; Belozerova, T.V.

TITLE: On the interaction of organic accelerators with the ingredients of
rubber mixes

PERIODICAL: Kauchuk i rezina, no. 5, 1962, 22 - 25

TEXT: The authors investigated the amount of accelerator consumed during
the process of vulcanization and the role of the adsorption-bound accelerator in
its reaction. The content of the organic accelerators was determined quantita-
tively by the colorimetric method using the ФЭК - М (FEK-M) colorimeter and ac-
cording to the NIIRP method. Experimental data showed that in simple mixing of
the accelerator with various other powdery ingredients at room temperature, in-
tense binding of the accelerators follows. The experiment to determine the
strength of the bond between the accelerator and the ingredients showed that in
additional extraction the bound captax was hardly extracted, especially from the
carbon black mixtures. In cold extraction the captax obtained was less than

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On the interaction of organic accelerators with

S/138/62/000/005/006/010
A051/A126

that extracted by the hot method. Experimental data further revealed that over 50% of the captax and diphenylguanidine are already bound with the ingredients in the mixing stage and cannot be detected in the free state. The authors conclude that sulfur, zinc oxide and various types of carbon black (gaseous, channel, thermal, jet and lamp) retain on their surface considerable quantities of accelerators, if mixed without heating. Upon heating of the powdery mixture of accelerators and sulfur, zinc oxide or carbon blacks, not only adsorption, but also chemical interaction of the accelerators with the ingredients of the rubber mix is noted. Thus, the accelerators are already used up during the mixing stage. The accelerator bound to the carbon black can also participate in reactions leading to the formation of free radicals and to the occurrence of sulfur fragments as a result of exchange reactions of the sulfur atoms. It determines the structurizing of the rubber within a shorter period of time.

ASSOCIATION: Dnepropetrovskiy khimiko-tekhnologicheskii institut im. F.E. Dzerzhinskogo i Yaroslavskiy zavod rezinovykh tekhnicheskikh izdeliy (Dnepropetrovsk Institute of Chemical Technology im. F.E. Dzerzhinskiy and Yaroslavl' Plant of Rubber Commercial Articles)

Card 2/3

On the interaction of organic accelerators with

S/138/62/000/005/006/010
A051/A126

SUBMITTED: At the Conference of Chemical Analysts of the Rubber Industry, January 17, 1961, in Moscow

Card 3/3

L 12428-63

EPR/EWP(j)/EPP(c)/EWT(m)/EDS AFFTC/ASD Pa-4/Pr-4/Pc-4 HM/WB

ACCESSION NR: AP3001166

S/0190/63/005/006/0910/0913

73
71

AUTHOR: Zakharov, N. D.; Bogdanovich, N. A.; Tyurenova, Z. D.; Glavina, V. S.

TITLE: The role of sulfur in the vulcanization of polychloroprene rubbers

SOURCE: Vy*sokomolekulyarny*ye soyedineniya, v. 5., no 6, 1963, 910-913

TOPIC TAGS: rubbers, vulcanization, chloroprene, sulfur, thiuram

ABSTRACT: While the main process involved in the vulcanization of polychloroprene rubber by sulfur in the presence of metallic oxides is believed to consist of an interaction of the latter with chlorine, there is also ample evidence pointing to the formation of a large number of sulfide bonds linking the chloroprene units. This would explain why organic polysulfides (such as thiuram) are capable of increasing the plasticity of these rubbers by breaking the polysulfide links in the process of ripening, with the formation of free radicals R-S sup ., sup .S-S sup ., and of dithiocarbamine, the latter capable of decomposition with the formation of volatile GS sub 2. Vulcanization experiments at 151C, conducted by the authors on polychloroprene in the presence of ZnO, MgO, S, and thiuram, showed a drop in the total sulphur as well as in free thiuram sulphur. It was also found that the amount of bound sulphur increases with the rise in the equilibrium modulus. Orig.

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L 12228-63

ACCESSION NR: AP3001166

art. has: 2 figures, 1 table, and 1 formula. 2

ASSOCIATION: Yaroslavskiy tekhnologicheskii institut (Yaroslavl Institute of Technology); Yaroslavskiy zavod rezinovykh tekhnicheskikh izdeliy (Yaroslavl Factory of Technical Rubber Products)

SUBMITTED: 21Dec61

DATE ACQ: 01Jul63

ENCL: 00

SUB CODE: 00

NO REF SOV: 005

OTHER: 003

Card 2/2

ZAKHAROV, N.D.; BOGDANOVICH, N.A.; TYUREMNOVA, Z.D.; GLAVINA, V.S.

Role of sulfur in the vulcanization of polychloroprene rubbers.
Vysokom.seed. 5 no.6:910-913 Je '63. (MIRA 16:9)

1. Yaroslavskiy tekhnologicheskii institut i Yaroslavskiy zavod
rezinovykh tekhnicheskikh izdeliy.
(Vulcanization) (Sulfur) (Chloroprene)

ACCESSION NR: AP4026364

S/0138/64/000/003/0012/0015

AUTHORS: Zakharov, N. D.; Orekhov, S. V.; Dogadkin, B. A.; Tyuremnova, Z. D.; Bogdanovich, N. A.; Glavina, V. S.

TITLE: Effect of covulcanization on the properties of mixes of nairit with other rubbers

SOURCE: Kauchuk i rezina, no. 3, 1964, 12-15

TOPIC TAGS: rubber, nairit, SKS 30, SKN 18, SKN 26, vulcanization, covulcanization, rubber compatibility, optical density, butadiene nitrile rubber, butadiene styrene rubber, additive property, vulcanization rate synchronization

ABSTRACT: The covulcanization of nairit with butadiene-styrene (SKS-30) and butadiene-nitrile rubbers (SKN-18 and SKN-26) was studied. As a preliminary step, the compatibility of these rubbers was investigated by three methods. The first method consisted of mixing 2.5% and 5.0% chloroform solutions of the rubbers, allowing them to stand up to 6 months, then recording their tendency to separate out. Secondly, measurements were made of the optical density of various mixtures of chloroform solutions of the rubbers. The third method determined the tensile strength of nonvulcanized plasticized rubber mixtures containing 50% lampblack.

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ACCESSION NR: AP4026364

The system nairit + SKN-18 proved to be the most compatible by all three methods. It was found that an optimum vulcanization system for a mixture of two rubbers cannot be prepared by just putting together the ingredients which show the best performance in each, since they do not necessarily cross-link and bind the structure of one rubber to that of the other. Thus, it was found that in the case of nairit + SKN-18 the use of metal oxides and sulfur was rather harmful, yielding poor quality vulcanizates, while the incorporation of thiuram and metal oxides without sulfur was beneficial. This was in accord with the finding that in the absence of sulfur, the optimum vulcanization time was the same for a compound on a nairit base and for one on an SKN-18 base. The importance of synchronization of the rate of vulcanization of each rubber component in order to obtain vulcanizates with optimum properties is stressed. Orig. art. has: 4 figures and 1 table.

ASSOCIATION: Yaroslavskiy tekhnologicheskii institut (Yaroslav Technological Institute); Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova (Moscow Institute of Fine Chemical Technology); Yaroslavskiy zavod rezinovykh tekhnicheskikh izdeliy
Card 2/3

ACCESSION NR: AP4026364

(Yaroslav Plant of Rubber Technical Products)

SUBMITTED: 00

DATE ACQ: 17Apr64

ENCL: 00

SUB CODE: GC, MT

NO REF SOV: 009

OTHER: 001

Card 3/3

L 314953-65 EWT(m)/EPF(c)/EWP(j) Fc-4/Pr-4 RM

ACCESSION NR: AP5008129

S/0138/65/000/003/0019/0023

AUTHOR: Bogdanovich, N. A.; Bol'shakova, Z. N.; Zakharov, N. D.; Rychkova, Ye. K.; Tyuremnova, Z. D.; Al'tov, A. I.; Poderukhina, V. M.

TITLE: The influence of some compositional factors on the stability of rubber made from chlorosulfonated polyethylene in corrosive media

SOURCE: Kauchuk i rezina, no. 3, 1965, 19-23

TOPIC TAGS: chlorosulfonated polyethylene, synthetic rubber, acid resistant rubber

ABSTRACT: Because of its high degree of saturation, chlorosulfonated polyethylene is relatively stable in corrosive media. It appeared to be of interest to investigate the effect of various components of these types of rubber on their behaviour toward various corrosive media. The influence of a number of conventional vulcanizing agents, accelerators, plasticizers and fillers was tested. The chemical stability of rubber types prepared from chlorosulfonated polyethylene was compared to the chemical stability of conventional butadiene rubber. The penetrability of each acid was tested by measuring the conductance of water which was separated from the acid by a film of the substance under investigation. Conventional mechanical strength tests were also performed. The test results are shown in tabular and graphic form.

Card 1/2

26
24
B 15

15

L 34953-65

ACCESSION NR: AP5008129

It was shown that various types of rubber can be prepared from chlorosulfonated polyethylene, whose resistance to acids is superior to that of conventional butadiene rubber. The composition of each product must be designed for the specific use intended. Orig. art. has: 6 tables. [VS]

ASSOCIATION: Yaroslavskiy zavod rezinovykh tekhnicheskikh izdeliy (Yaroslavl' Technical Rubber Equipment Plant); Yaroslavskiy tekhnologicheskii institut (Yaroslavl' Technological Institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

NO REF SOV: 004

OTHER: 001

ATD PRESS: 3214

Card 2/2

BOGDANOVICH N. I.

USSR / Farm Animals. Small Horned Stock.

Q-2

Abs Jour: Ref Zhur-Biol., No 23, 1958, 105544.

Author : Bogdanovich, N. I.

Inst : Kishinov Agricultural Institute.

Title : Breeding of the Moldavian Karakul in the Kolkhozos of B. Zguritskiy Rayon.

Orig Pub: Tr. Kishinevsk. s.-kh. in-t, 1957, 14, 109-133.

Abstract: Crossbreeding of the local ordinary ewes with Karakul rams brought from Central Asia showed that hybrids surpass the original breeds as to live weight and basic measurements. Most of them possess strong (55.6-76.6%) or hardy (26.6-40.2%) constitution. The average wool yield in black hybrids is 2.85 kg. and in grey ones 2.6 kg. 64.5% of black lambs (born in 1955) were

Card 1/2

BOGDANOVICH, N.K.

Building coke-oven batteries. Koks i khim. no.9:62 '61.
(MIRA 15:1)

1. Magnitogorskiy metallurgicheskiy kombinat.
(Coke ovens)

USSR/General Problems of Pathology - Comparative Oncology.
Tumors of Man.

U-3

Abs Jour : Ref Zhur - Biol., No 16, 1958, 75537

Author : Bogdanovich, N.K., Zhdanov, V.S.

Inst : -

Title : Two Cases of Primary Sarcoma of the Heart.

Orig Pub : Arkhiv patologii, 1957, 19, No 1, 71-73.

Abstract : Description of 2 cases of primary sarcoma of the heart by females 45 and 65 years old. In both cases, rhabdomyosarcoma of the heart was diagnosed on the basis of presence of giant cells with multiple nuclei or with one large nucleus with clear chromatin substance. The difficulty of clinical and histological diagnostic is underlined. In both cases the diagnosis was made post mortem.

Card 1/1

BOGDANOVICH, N.K.; ZHDANOV, V.S. (Moskva)

Problem of so-called endocardial fibroelastosis. Arkh.pat. 19 no.6:
61-67 '57. (MLPA 10:10)

1. Iz patologoanatomicheskogo otdeleniya (zav. - deystvitel'nyy chlen
AMN SSSR prof. I.V.Davydovskiy) bol'nitsy No.23 imeni Medsantrud
(glavnyy vrach A.P.Timofeyeva)
(ENDOCARDIAL FIBROELASTOSIS, case reports,
(Rus))

Bogdanovich N. K.
EXCERPTA MEDICA Sec 5 Vol 12/3 Gen. Path. Mar 59

893. METASTASIZING TUMOURS OF THE BRAIN (Russian text) - Bogdanovich N. K. - ARKH. PATOL. 1958, 20/6 (83-86) Illus. 3
Report on a multiform spongioblastoma in a 61-year-old woman, who suffered from hypertension. Autopsy showed a large tumour in the right hemisphere, which had produced a small metastasis (0.5 cm. in diameter) subpleurally in the superior lobe of the right lung.
Brandt - Berlin (V, 8, 16)

BOGDANOVICH, N.K. (Moskva)

Renal hypertension. Arkh.pat. 21 no.4:73-76 '59.

(MIRA 12:12)

1. Iz patologoanatomicheskogo otdeleniya (zav. - deystvitel'nyy chlen
AMN SSSR prof. I.V. Davydovskiy) bol'nitsy No.23 im. Medsantrud (glav-
nyy vrach A.P. Timofeyeva).

(HYPERTENSION, casereports,
renal (Rus))